

CLAIMS

What is claimed is:

1. An adjustable ankle device for a prosthetic foot, comprising:
 - a) an upper portion configured to be coupled to a socket of an amputee; and
 - 5 b) a lower portion, adjustably coupled to the upper portion, configured to be attached to a foot member with heel and toe sections; and
 - c) a movable coupling, disposed between the upper and lower portions, and movable so that the lower portion moves:
 - i) simultaneously in a downward and forward direction in which the lower
 - 10 portion simultaneously pivots downward and displaces forward with respect to the upper portion; and
 - ii) simultaneously in a rearward and upward direction in which the lower portion simultaneously pivots upward and displaces rearward with respect to the upper portion; and
 - 15 d) the lower portion being pivotal and displaceable with respect to the upper portion between at least two fixed positions, including:
 - i) a low position configured to dispose the heel section at a lower
 - elevational position, and to dispose the heel section in a rearward position; and
 - ii) a high position configured to dispose the heel section at a higher
 - 20 elevational position, and to dispose the heel section in a forward position.
2. A device in accordance with claim 1, wherein the movable coupling is oriented upright with respect to the lower portion and has at least one end of the moving coupling disposed at a lower elevation with respect to a central section of the movable coupling, and
- 25 including a displacement member slidably coupled to a displacement track.
3. A device in accordance with claim 1, wherein the movable coupling further includes:
 - an arched coupling, disposed between the upper and lower portions, oriented upright with respect to the lower portion and having at least one end of the arched
 - 30 coupling being disposed at a lower elevation with respect to a central section of the arched coupling, and including an arcuate projection slidable in an arcuate slot.

4. A device in accordance with claim 3, further comprising an attachment member attached to the upper portion with the arcuate slot formed in the attachment member; and further comprising a foot member with the arcuate projection extending from the foot member.

5 5. A device in accordance with claim 3, wherein the arcuate slot has a T-shaped cross-sectional shape; and wherein the arcuate projection has a T-shaped cross-sectional shape.

6. A device in accordance with claim 3, wherein the arcuate projection includes a concave bearing surface.

10 7. A device in accordance with claim 1, further comprising:
a) an aperture, formed in the displacement member; and
b) a locking pin, disposable in the aperture.

15 8. A prosthetic foot device with an adjustable ankle, comprising:
a) an attachment member configured to be coupled to a socket of an amputee; and
b) a foot member, adjustably coupled with respect to the attachment member, having heel and toe sections, and being pivotal and displaceable in:
i) a downward and forward direction in which the toe section pivots
20 downward and the heel portion simultaneously displaces forward with respect to the attachment member; and
ii) a rearward and upward direction in which the toe section pivots upward and the heel portion simultaneously displaces rearward with respect to the attachment member.

25 9. A device in accordance with claim 8, wherein the foot member is pivotal and displaceable with respect to the attachment member between at least two fixed positions, including:

30 a) a low position in which the heel section is disposed at a lower elevational position, and in which the heel section is disposed in a rearward position; and
b) a high position in which the heel section is disposed at a higher elevational position, and in which the heel section is disposed in a forward direction.

10. A device in accordance with claim 8, wherein the foot member is both pivotal and slidable with respect to the attachment member.

11. A device in accordance with claim 8, further comprising:

- 5 a) an arcuate slot, associated with one of the attachment member or foot member; and
- b) an arcuate projection, associated with the other of the foot member or attachment member, and slidably disposed in the arcuate slot.

10 12. A device in accordance with claim 11, wherein the arcuate slot is formed in the attachment member; and wherein the arcuate projection extends from the foot member.

13. A device in accordance with claim 11, wherein the arcuate slot has a T-shaped cross-sectional shape; and wherein the arcuate projection has a T-shaped cross-sectional shape.

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14. A device in accordance with claim 11, wherein the arcuate projection includes a concave bearing surface.

15. A device in accordance with claim 11, further comprising:

- 20 a) an aperture, formed in the projection; and
- b) a locking pin, disposable in the aperture.

16. A prosthetic foot device, comprising:

- 25 a) an attachment member configured to be coupled to a socket of an amputee; and
- b) a foot member, adjustably coupled to the attachment member, having heel and toe sections; and
- c) an adjustable ankle, coupling the foot member to the attachment member, including an arched coupling oriented upright with at least one end of the arched coupling being disposed at a lower elevation with respect to a central section of the
- 30 arched coupling, and including an arcuate projection slidable in an arcuate slot in:
- i) a downward and forward direction in which the toe section pivots downward and the heel section simultaneously displaces forward with respect to the attachment member; and

ii) a rearward and upward direction in which the toe section pivots upward and the heel section simultaneously displaces rearward with respect to the attachment member.

5 17. A device in accordance with claim 16, wherein the foot member is pivotal and displaceable with respect to the attachment member between at least two positions, including:

a) a low position in which the toe section of the foot member is pivoted in an upward direction with respect to the attachment member with the heel section disposed at a lower elevational position, and in which the heel section is disposed in a rearward position; and

10 b) a high position in which the toe section of the foot member is pivoted in a downward direction with respect to the attachment section with the heel section disposed at a higher elevational position, and in which the heel section is disposed in a forward position.

15 18. A device in accordance with claim 16, wherein the arcuate slot is formed in the attachment member; and wherein the arcuate projection extends from the foot member.

20 19. A device in accordance with claim 18, wherein the arcuate slot has a T-shaped cross-sectional shape; and wherein the arcuate projection has a T-shaped cross-sectional shape.

20. A device in accordance with claim 18, wherein the arcuate projection includes a concave bearing surface.

25 21. A device in accordance with claim 18, further comprising:

- a) an aperture, formed in the projection; and
- b) a locking pin, disposable in the aperture.

22. A method for adjusting a prosthetic foot, comprising the steps of:

30 a) pivoting a toe section of a foot member in a downward direction with respect to an attachment member configured to be coupled to a socket of an amputee so that a heel section of the foot member is disposed at a higher elevational position; and

b) simultaneously displacing the heel section in a forward direction with respect to the attachment member so that the heel section is disposed at a greater forward position.

- 5 23. An adjustable ankle device for a prosthetic foot, comprising:
- a) an upper portion configured to be coupled to a socket of an amputee; and
 - b) a lower portion, adjustably coupled to the upper portion, configured to be attached to a foot member with heel and toe sections; and
 - c) means for movably coupling the lower portion to the upper portion and for
- 10 simultaneously i) pivoting the lower portion downward with respect to the upper portion, and ii) displacing the lower portion forward with respect to the upper portion.
24. A device in accordance with claim 23, further comprising:
- a foot member, attached to the lower portion, having heel and toe sections; and
- 15 the means for movably coupling further includes means for simultaneously i) pivoting the toe section of the foot member downward with respect to the heel section, and ii) displacing the heel section forward with respect to the upper portion.
25. A prosthetic foot device with an adjustable ankle, comprising:
- a) an upper portion configured to be coupled to a socket of an amputee; and
 - b) a lower portion, adjustably coupled to the upper portion;
 - c) a foot member, attached to the lower portion, having heel and toe sections; and
 - d) means for selectively adjusting the elevational position of the heel section with
- 20 respect to the toe section between at least two fixed positions, including:
- i) a low position in which the heel section is disposed at a lower
 - elevational position with respect to the toe section, and in which the heel section
 - is disposed in a rearward position with respect to the upper portion; and
 - ii) a high position in which the heel section is disposed at a higher
 - elevational position with respect to the toe section, and in which the heel section
- 25 is disposed in a forward position with respect to the upper portion.
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